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10/538,163

06/02/2006

Danny A. Grant

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EXAMINER

NAM, HYUN

ART UNIT

PAPER NUMBER

2109

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

03/01/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/538,163

Applicant(s)

GRANT ET AL.

Examiner

Hyun Nam

Art Unit

2109

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-31 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>2/13/2006 & 4/4/2006</u> . | 6) <input type="checkbox"/> Other: ____. |

Art Unit: 2109

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 10-14, 17 and 18 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The phrase, 'computer-readable media' in the claims 10-14 and the phrase, 'A data stream embodied in a carrier signal' in the claims 17 and 18 are non-statutory subject matters (see MPEP 2106.01) because they have not been further defined anywhere in the disclosure and they can be construed to encompass an unpatentable medium such as an electromagnetic carrier signal which is not a "process, machine, manufacture, or composition of matter."

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 4, 6-9, 13-18, and 26-31 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 4 and 13 recites the limitation " the determination". There is insufficient antecedent basis for this limitation in the claim.

Use of the word 'body' in claims 19-25 fails to particularly point out and distinctly claim the subject matter. For the purpose of this examination, the word 'body' is construed to mean enclosure or anything associated therewith.

Art Unit: 2109

Use of the word 'contact' in claims 6-9, 14-18, and 26-31 fails to particularly point out and distinctly claim the subject matter. For the purpose of this examination, the word 'contact' is construed to mean switch or anything associated therewith.

Use of the word 'request' in claims 6-9, 14-18, and 26-31 fails to particularly point out and distinctly claim the subject matter. The examiner cannot determine whether the word 'request' is a signal to/from a device (i.e. electrical signal to/from electronics or a digital message to/from a memory/register) or a message to/from a user (i.e. keypad, display or audio prompt). Also, if the word 'request' is indeed a message of some form, then the examiner cannot determine the source or destination of that message.

Due to ambiguities in claims 6-9, 14-18, and 26-31 that make the claims inscrutable, no art has been applied thereto, see *In re Steele*, 49 CCPS 1295, 305 F.2d 859, 134 USPQ 292 (1962) and *In re Wilson*, 424 F.2d 1382, 165 USPQ 494 (CCPA 1970). The examiner will not speculate as to the intended meaning of the claims.

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-5, 10-13, and 19-25 are rejected under 35 U.S.C. 102(b) as being anticipated by Wanderlich (U.S. Patent Number 6,028,531).

On claim 1, Wanderlich teaches a method, comprising: receiving an input signal associated with an actuation of a user-interface member (see Column 7 Line 25-27);

Art Unit: 2109

determining a haptic code associated with the actuation (see Column 7 Line 11-23; Note, numbers assigned to vibration frequency, amplitude, and duration); and including the haptic code in an output signal (see Column 7 Line 30-33).

On claim 2, Wanderlich teaches the method of claim 1 further comprising sending the output signal to a remote handheld communication device (Note, it is inherent that device Wanderlich teaches is a mobile communication device that can be hand carried or handheld).

On claim 3, Wanderlich teaches the method of claim 1 further comprising including in the output signal at least one of a message (see Column 6 Line 49-50), a video image, and a graphical feature. ^(see also numeric display 38)

On claim 4, Wanderlich teaches the method of claim 1 further comprising making the determination is based on a predetermined scheme (see Column 7 Line 15-23).

On claim 5, Wanderlich teaches the method of claim 1 wherein the user-interface member includes at least one of a key, a button, a key pad (see Column 7 Line 8), a direction pad, a touch screen, a scroll wheel, a mini-joystick, a trackball, and a knob.

On claim 10, Wanderlich teaches a computer-readable medium on which is encoded program code (see Column 6 Line 38-41), comprising: program code for receiving an input signal associated with an actuation of a user-interface member (see Column 6 Line 65-67); program code for determining a haptic code associated with the actuation (see Column 6 Line 54-59); and program code for including the haptic code in an output signal (see Column 6 Line 60-64).

On claim 11, Wanderlich teaches the computer-readable medium of claim 10 further comprising program code for sending the output signal to a remote handheld communication device (Note, it is inherent that device Wanderlich teaches is a mobile communication device that can be hand carried or handheld).

On claim 12, Wanderlich teaches the computer-readable medium of claim 10 further comprising program code for including in the output signal at least one of a message (see Column 6 Line 49-50), a video image, and a graphical feature.

On claim 13, Wanderlich teaches the computer-readable medium of claim 10 further comprising program code for making the determination is based on a predetermined scheme (see Column 7 Line 9 and 15-24).

On claim 19, Wanderlich teaches an apparatus, comprising: a user-interface member coupled to a body (see Column 7 Line 1); a processor (see Column 5 Line 13; CPU); an actuator (see Column 7 Line 4; vibrating means) coupled to the body and in communication with the processor (see Column 7 Line 9); and a memory (see Column 41; memory means) in communication with the processor, the memory storing program code executable by the processor (see Column 5 Line 13-14), including: program code for receiving an input signal associated with an actuation of the user-interface member (see Column 6 Line 54-59); program code for determining a haptic code associated with the actuation (see Column 6 Line 60-64); and program code for including the haptic code in an output signal (see Column 6 Line 60-64).

On claim 20, Wanderlich teaches the apparatus of claim 19 wherein the body is included in a handheld communication device (Note, it is inherent that device

Wanderlich teaches is a mobile communication device that can be hand carried or handheld).

On claim 21, Wanderlich teaches the apparatus of claim 20 wherein the handheld communication device includes one of a cellular phone, a satellite phone, a cordless phone, a personal digital assistant, a pager (see Column 5 Line 15; paging receiver), a two-way radio, a portable computer, a game console controller, a personal gaming device, and an MP3 player.

On claim 22, Wanderlich teaches the apparatus of claim 19 wherein the user-interface member includes at least one of a key, a button (see Figure 6 selector switch 40), a key pad, a direction pad, a touch screen, a scroll wheel, a mini-joystick, a trackball, and a knob.

On claim 23, Wanderlich teaches the apparatus of claim 19 wherein the memory further stores program code for sending the output signal to a remote handheld communication device (Note, it is inherent that device Wanderlich teaches is a mobile communication device that can be hand carried or handheld).

On claim 24, Wanderlich teaches the apparatus of claim 19 wherein the memory further stores program code for including in the output signal at least one of a message (see Column 6 Line 49-50), a video image, and a graphical feature.

On claim 25, ^{Wanderlich}~~the Fernandez~~ teaches the apparatus of claim 19 wherein the user-interface member is one of a plurality of user-interface members coupled to the body, the memory further storing a plurality of haptic codes (see Column 7 Line 15-24; Note a column indicating numeric indices), each associated with one of the plurality of user-

Art Unit: 2109

interface members according to a predetermined scheme (see Column 7 Line 15-23; Note a column indicating amplitude, frequency, and duration).

Claims 1-5, 10-13, and 19-25 are rejected under 35 U.S.C. 102(b) as being anticipated by Fernandez (U.S. Patent Number 4,851,820).

On claim 1, Fernandez teaches a method, comprising: receiving an input signal (see Figure 5A Step 104) associated with an actuation of a user-interface member (see Figure 5A Step 102); determining a haptic code associated with the actuation (see Figure 5A Step 116, 120, and 122); and including the haptic code in an output signal (see Figure 5A Step 148).

On claim 2, Fernandez teaches the method of claim 1 further comprising sending the output signal to a remote handheld communication device (see Title).

On claim 3, Fernandez teaches the method of claim 1 further comprising including in the output signal at least one of a message (see Figure 5A Step 124), a video image, and a graphical feature.

On claim 4, Fernandez teaches the method of claim 1 further comprising making the determination is based on a predetermined scheme (see Figure 4 Threshold circuit 35).

On claim 5, Fernandez teaches the method of claim 1 wherein the user-interface member includes at least one of a key, a button (see Figure 5A Step 102), a key pad, a direction pad, a touch screen, a scroll wheel, a mini-joystick, a trackball, and a knob.

On claim 10, Fernandez teaches a computer-readable medium (see Figure 4 Program ROM 25) on which is encoded program code, comprising: program code (see

Art Unit: 2109

Abstract Line 21-22) for receiving an input signal (see Figure 5A Step 104) associated with an actuation of a user-interface member (see Figure 5A Step 102); program code for determining a haptic code associated with the actuation (see Figure 5A Step 116, 120, and 122); and program code for including the haptic code in an output signal (see Figure 5A Step 148).

On claim 11, Fernandez teaches the computer-readable medium of claim 10 further comprising program code for sending the output signal to a remote handheld communication device (see Title).

On claim 12, Fernandez teaches the computer-readable medium of claim 10 further comprising program code for including in the output signal at least one of a message (see Figure 5A Step 124), a video image, and a graphical feature.

On claim 13, Fernandez teaches the computer-readable medium of claim 10 further comprising program code for making the determination is based on a predetermined scheme (see Figure 4 Threshold circuit 35).

On claim 19, Fernandez teaches an apparatus, comprising: a user-interface member (see Figure 4 Button Switch 28) coupled to a body (enclosure for pager); a processor (see Figure 4 Microprocessor Decoder 23); an actuator (see Figure 4 Indicator 26) coupled to the body and in communication with the processor; and a memory (see Figure 4 Program ROM 25) in communication with the processor, the memory storing program code executable by the processor (see Abstract Line 21-22), including: program code for receiving an input signal (see Figure 5A Step 104) associated with an actuation of the user-interface member (see Figure 5A Step 102);

program code for determining a haptic code associated with the actuation (see Figure 5A Step 116, 120, and 122); and program code for including the haptic code in an output signal (see Figure 5A Step 148).

On claim 20, Fernandez teaches the apparatus of claim 19 wherein the body is included in a handheld communication device (see Title).

On claim 21, Fernandez teaches the apparatus of claim 20 wherein the handheld communication device includes one of a cellular phone, a satellite phone, a cordless phone, a personal digital assistant, a pager (see Title), a two-way radio, a portable computer, a game console controller, a personal gaming device, and an MP3 player.

On claim 22, Fernandez teaches the apparatus of claim 19 wherein the user-interface member includes at least one of a key, a button (see Figure 4 Button Switch 28), a key pad, a direction pad, a touch screen, a scroll wheel, a mini-joystick, a trackball, and a knob.

On claim 23, Fernandez teaches the apparatus of claim 19 wherein the memory further stores program code for sending the output signal to a remote handheld communication device (see Figure 4 Microprocessor Decoder 23 and Indicator 26; and Column 7, Line 40-48).

On claim 24, Fernandez teaches the apparatus of claim 19 wherein the memory further stores program code for including in the output signal at least one of a message (see Figure 5A Step 124), a video image, and a graphical feature.

On claim 25, Fernandez teaches the apparatus of claim 19 wherein the user-interface member is one of a plurality of user-interface members coupled to the body,

Art Unit: 2109

the memory further storing a plurality of haptic codes (see Column 7, Line 40-48), each associated with one of the plurality of user-interface members according to a predetermined scheme (see Figure 4 Threshold circuit 35).

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-5, 10-13, and 19-25 are rejected under 35 U.S.C. 102(e) as being anticipated by the Kaaresoja et al. (U.S. Patent Number 6,963,762).

On claim 1, Kaaresoja et al. teaches a method, comprising: receiving an input signal (see Figure 1, Transceiver 104) associated with an actuation of a user-interface member (see Figure 1 Keypad 108); determining a haptic code associated with the actuation (see Figure 1 line between Memory 140 and Controller 106, 'instruction on how to interpret a tactile sensation pattern'); and including the haptic code in an output signal (see Figure 1 line between Controller 106 and Vibration motor 100).

On claim 2, Kaaresoja et al. teaches the method of claim 1 further comprising sending the output signal to a remote handheld communication device (see Title).

On claim 3, Kaaresoja et al. teaches the method of claim 1 further comprising including in the output signal at least one of a message (see Figure 1 Loudspeaker

Art Unit: 2109

114), a video image (see Figure 1 Display 110), and a graphical feature (see Figure 1 Display 110).

On claim 4, Kaaresoja et al. teaches the method of claim 1 further comprising making the determination is based on a predetermined scheme (see Figure 1 Stored vibration pattern 140e).

On claim 5, Kaaresoja et al. teaches the method of claim 1 wherein the user-interface member includes at least one of a key, a button, a key pad (see Figure 1 Keypad 108), a direction pad, a touch screen, a scroll wheel, a mini-joystick, a trackball, and a knob.

On claim 10, Kaaresoja et al. teaches a computer-readable medium (see Figure 1 Memory 140) on which is encoded program code, comprising: program code (see Paragraph 30 Line 4; software) for receiving an input signal (see Figure 1 Transceiver 104) associated with an actuation of a user-interface member (see Figure 1 Keypad 108); program code for determining a haptic code associated with the actuation (see Figure 1 line between Memory 140 and Controller 106, 'instruction on how to interpret a tactile sensation pattern'); and program code for including the haptic code in an output signal (see Figure 1 line between Controller 106 and Vibration motor 100).

On claim 11, Kaaresoja et al. teaches the computer-readable medium of claim 10 further comprising program code for sending the output signal to a remote handheld communication device (see Title).

On claim 12, Kaaresoja et al. teaches the computer-readable medium of claim 10 further comprising program code for including in the output signal at least one of a

Art Unit: 2109

message (see Figure 1 Loudspeaker 114), a video image (see Figure 1 Display 110), and a graphical feature (see Figure 1 Display 110).

On claim 13, Kaaresoja et al. teaches the computer-readable medium of claim 10 further comprising program code for making the determination is based on a predetermined scheme (see Figure 1 Stored vibration pattern 140e).

On claim 19, Kaaresoja et al. teaches an apparatus, comprising: a user-interface member (see Figure 1 Keypad 108) coupled to a body (enclosure for mobile phone); a processor (see Figure 1 Controller 106); an actuator (see Figure 1 Vibration motor 100) coupled to the body and in communication with the processor; and a memory (see Figure 1 Memory 140) in communication with the processor, the memory storing program code executable by the processor (see Paragraph 30 Line 4; software), including: program code for receiving an input signal (see Figure 1 Transceiver 104) associated with an actuation of the user-interface member (see Figure 1 Keypad 108); program code for determining a haptic code associated with the actuation (see Figure 1 line between Memory 140 and Controller 106, 'instruction on how to interpret a tactile sensation pattern'); and program code for including the haptic code in an output signal (see Figure 1 line between Controller 106 and Vibration motor 100).

On claim 20, Kaaresoja et al. teaches the apparatus of claim 19 wherein the body is included in a handheld communication device (see Title).

On claim 21, Kaaresoja et al. teaches the apparatus of claim 20 wherein the handheld communication device includes one of a cellular phone (see Title), a satellite phone (see Title), a cordless phone (see Title), a personal digital assistant, a pager, a

two-way radio, a portable computer, a game console controller, a personal gaming device, and an MP3 player.

On claim 22, Kaaresoja et al. teaches the apparatus of claim 19 wherein the user-interface member includes at least one of a key, a button, a key pad (see Figure 1 Keypad 108), a direction pad, a touch screen, a scroll wheel, a mini-joystick, a trackball, and a knob.

On claim 23, Kaaresoja et al. teaches the apparatus of claim 19 wherein the memory further stores program code for sending the output signal to a remote handheld communication device (see Figure 1 line between Controller 106 and Vibration motor 100).

On claim 24, Kaaresoja et al. teaches the apparatus of claim 19 wherein the memory further stores program code for including in the output signal at least one of a message (see Figure 1 Loudspeaker 114), a video image (see Figure 1 Display 110), and a graphical feature (see Figure 1 Display 110).

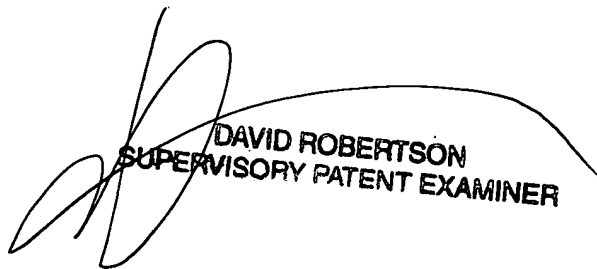
On claim 25, Kaaresoja et al. teaches the apparatus of claim 19 wherein the user-interface member is one of a plurality of user-interface members coupled to the body, the memory further storing a plurality of haptic codes (see Figure 1 Stored vibration pattern 140e), each associated with one of the plurality of user-interface members according to a predetermined scheme (see Figure 1 Keypad 108).

Art Unit: 2109

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hyun Nam whose telephone number is (512) 270-1725. The examiner can normally be reached on Monday through Friday from 8:30 AM to 5:00 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Robertson, can be reached on 571-272-4186. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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20 February 2007



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